

2009

*Birds of the Rocky Mountains*—Species Accounts,  
pages 262–277: Swallows, Jays, & Crows

Paul A. Johnsgard

*University of Nebraska-Lincoln*, pajohnsgard@gmail.com

Follow this and additional works at: <http://digitalcommons.unl.edu/bioscibirdsrockymtns>



Part of the [Ornithology Commons](#)

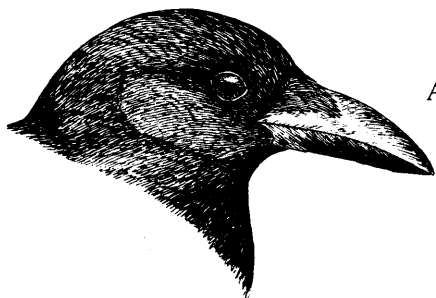
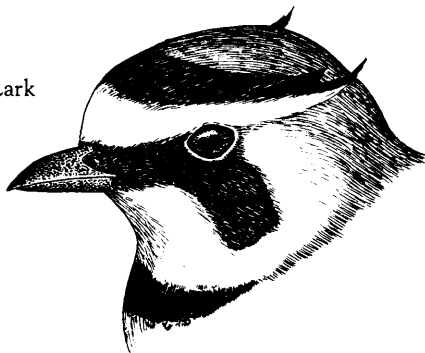
---

Johnsgard, Paul A., "Birds of the Rocky Mountains—Species Accounts, pages 262–277: Swallows, Jays, & Crows" (2009). *Birds of the Rocky Mountains -- Paul A. Johnsgard*. 18.

<http://digitalcommons.unl.edu/bioscibirdsrockymtns/18>

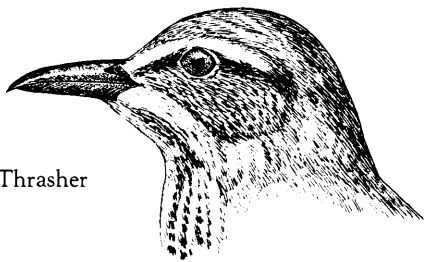
This Article is brought to you for free and open access by the Papers in the Biological Sciences at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Birds of the Rocky Mountains -- Paul A. Johnsgard by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Horned Lark



American Crow

Sage Thrasher



## Purple Martin (*Progne subis*)

**Identification:** The largest of the swallow family in North America, and one of the most familiar, owing to its tendency to nest in man-made birdhouses. Adults are mostly bluish black above, and bluish to grayish below, depending on sex and age. The tail is somewhat forked, and the frequently uttered calls include extended twittering notes. Nests colonially, and usually seen near cities or human habitations.

LATILONG STATUS

		?	
		V	

V			V
		M	

			M
		M	M
V	V		V

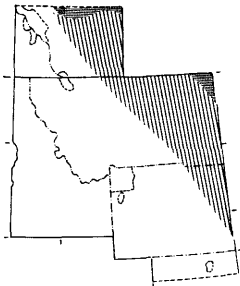
**Status:** Limited as a summer resident to extreme northeastern Montana and the central portions of Alberta in this region, but migrating through eastern Montana and Wyoming. A rare migrant in eastern Colorado, but breeds locally in western Colorado to the south of this book's coverage. Absent from most of the montane parks, but a vagrant at Rocky Mountain N.P.

**Habitats and Ecology:** Restricted in our region almost entirely to areas where "martin houses" have been erected. Like the other swallows, it obtains all of its food by aerial foraging for insects.

**Seasonality:** Colorado records extend from May 20 to August. In Alberta they arrive about the first day of May, and few are seen after the end of August. There are few regional egg records, but in North Dakota eggs have been reported from April 29 to August 24, an extended breeding period apparently related to persistent renesting efforts.

**Comments:** This species has probably benefitted greatly from human interest in it, and especially at the western edge of its range is essentially limited to those locations where nesting boxes are provided for it. However, the birds sometimes also use old woodpecker holes or crevices in old buildings for nesting.

**Suggested Reading:** Allen & Nice, 1952; Johnston & Hardy, 1962.



## Tree Swallow (*Iridoprocne bicolor*)

*Identification:* This attractive swallow is a two-toned iridescent bluish black above and immaculate white below, and has a somewhat forked tail. It closely resembles the violet-green swallow, but lacks that species' large white flank patches.

*Status:* A local summer resident throughout the region, but lacking from treeless areas and the high montane communities. Present and breeding in all the montane parks.

*Habitats and Ecology:* Breeding in the region extends from riparian woodlands through the aspen zone, and into the lower levels of the coniferous forest zone. Outside the breeding season often seen over lakes or rivers, as well as over other open habitats. Nesting is especially prevalent in the aspen areas, where old woodpecker holes are available, but also occurs at times in birdhouses.

*Seasonality:* Colorado records are from April 6 to October 9, and in Wyoming range from April 11 to October 1. In Alberta the birds appear the latter half of April, and are usually gone by the end of August, with a few sometimes extending into September.

*Comments:* This is one of the earliest swallows to arrive in northern areas, often arriving at least a month before nesting gets underway. This may reflect the limited number of suitable nesting sites available to these hole-nesters, and the advantages of taking early possession of the available sites.

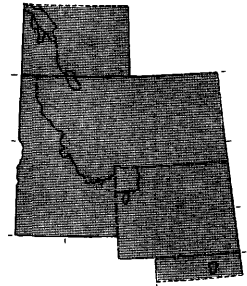
*Suggested Reading:* Chapman, 1955; Stocck, 1970; Kuerzi, 1941; Paynter, 1954.

LATILONG STATUS

S	S	S	s
s	S	S	S
S	S	S	S

S	S	S	S
s	S	s	M
s	S	S	s

S	S	S	s
S	S	S	S
S	S	S	S



## Violet-green Swallow (*Tachycineta thalassina*)

*Identification:* Very similar to the preceding species, but the white sides are continued up behind the wings to form large flank patches that nearly meet on the lower back. There is also somewhat less black on the head, with white extending slightly above the eye.

LATILONG STATUS

S	S	S	
S	S	S	M
S	S	s	s

S	S	S	S
s	S	S	M
s	S	S	S

s	s	S	S
S	S	s	S
S	S	S	S

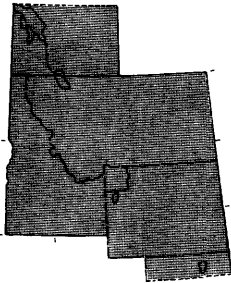
*Status:* A summer resident in mountainous areas, occurring locally throughout the entire region; present and probably breeding in all of the montane parks.

*Habitats and Ecology:* Generally associated with open coniferous forests, such as ponderosa pines, but also breeds in aspen groves, in riparian woods, and sometimes also in urbanized areas. Nesting sites are rather variable, and include old woodpecker holes, natural tree or cliff cavities, and occasionally in birdhouses.

*Seasonality:* Colorado records are from April 1 to October 9, and Wyoming records are from May 7 to September 8. In Montana and southern Alberta the birds usually arrive in April and leave in late August or early September. Egg or nest records in Colorado are from early June to mid-July, and in Montana active nests have also been seen from early June to early July, with fledged young out of the nest by July 23.

*Comments:* Like the hole-nesting tree swallow, this is a relatively early migrant in the spring, and it also tends to leave fairly early in the fall, moving to wintering areas from Mexico southward.

*Suggested Reading:* Edson, 1943; Combellack, 1954.



## Northern Rough-winged Swallow (*Stelgidopteryx ruficollis*)

*Identification:* This brownish swallow is easily confused with the similar bank swallow, but unlike that species it has a dingy gray throat that grades into a somewhat lighter belly. Its tail is slightly forked, like that of the bank swallow, but unlike that species it rarely if ever nests in large colonies. Instead it is likely to be seen as single individuals or pairs during the breeding season.

*Status:* A local summer resident throughout the region, mainly at lower elevations and in open habitats. Present in all the montane parks, and breeds in most, but rare in the more southerly parks except at the lowest elevations.

*Habitats and Ecology:* Associated with open areas, including agricultural lands, rivers and lakes, and grasslands near water, and breeding almost exclusively in cavities dug in earthen banks of clay, sand, or gravel.

*Seasonality:* Colorado records extend from April 4 to October 4, and Wyoming records are from May 1 to September 6. In Montana and southern Alberta the birds are usually present from late April or early May until the end of August. Egg records are limited for the region, but active nests in North Dakota have been seen from May 10 to July 15, and Montana egg records are from June 14 to July 6. Nest excavation has been observed in Jasper N.P. as early as May 31.

*Comments:* The "rough-winged" condition of this species refers to the unusually roughened leading edges of the outer primary feathers. The function of this condition is unproven, but perhaps it serves as a sound-damping device, making the birds more efficient aerial hunters, in a similar manner to the specialized feathers of owl wings.

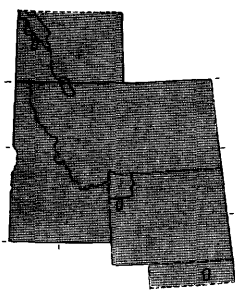
*Suggested Reading:* Lunk, 1962; Bent, 1942.

### LATILONG STATUS

S	S	S	s
s	S	s	s
S	S	s	s

S	S	s	S
s	S	S	S
s	S	S	S

S	S	S	M
M	S	S	S
S	S	S	S



## Bank Swallow (*Riparia riparia*)

*Identification:* Very similar to the previous species, but in this one the throat is a clear white, which area is separated from the white belly by a brownish breastband. The birds nest in cavities dug in exposed banks, usually in rather large colonies.

### LATILONG STATUS

S	S	S	s
s	S	S	s
S	S	S	s

S	S	S	S
S	S	s	s
s	S	S	S

S	S	S	M
s	s	s	S
S	S	S	S

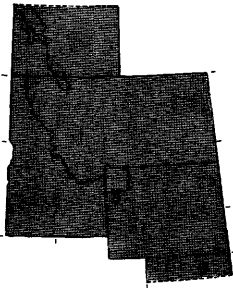
*Status:* A summer resident in suitable habitats throughout the region, mainly at lower elevations. Breeds in several of the montane parks, but not common in any.

*Habitats and Ecology:* Breeding almost always occurs near water, such as in steep banks along rivers, roadcuts near lakes, gravel pits, and similar areas with steep slopes of clay, sand, or gravel. Outside the breeding season the birds are of broader distribution, sometimes foraging over agricultural lands.

*Seasonality:* Colorado records are from April 7 to October 20, and Wyoming records are from April 21 to October 4. In Montana and southern Alberta the birds usually arrive in late April or early May, and are often gone by the end of August.

*Comments:* Territoriality in these highly colonial birds is limited to the burrow itself, which is sometimes used in subsequent years by the same individuals. When burrows need to be dug or deepened, both members of the pair participate, scratching at the earth with their claws, often until the burrow is a full two feet in length.

*Suggested Reading:* Beyer, 1938; Gaunt, 1965; Peterson, 1955.



## Cliff Swallow (*Petrochelidon pyrrhonota*)

*Identification:* This swallow is easily recognized by its golden-orange rump patch, its square rather than forked tail, and its pale yellowish forehead patch. It is a highly social species, and is usually seen in large groups on the breeding grounds.

*Status:* A summer resident throughout the region, including all of the montane parks, where it is a common to abundant breeder.

*Habitats and Ecology:* A wide variety of nesting areas are used by this species, but in the region under consideration vertical cliff-sides and the sides or undersides of bridges are perhaps most commonly used. The nests are gourd-like structures of dried mud, made of small mud globules that are gathered by the birds and carried back in the bill.

*Seasonality:* Colorado records are from April 16 to October 10, and Wyoming records extend from May 7 to September 4. In Alberta and Montana the birds are usually present from early May to late August. Egg records in Wyoming are from June 11 to July 15, and in Montana from May 20 to mid-July.

*Comments:* Cliff swallows usually have to rebuild most or all of their mud nests each year, a job that may occupy both members of the pair for nearly two weeks. The nesting season is quite prolonged, and at least in some areas a proportion of the females produce two broods, often changing mates between broods.

*Suggested Reading:* Samuel, 1971; Emlen, 1952, 1954; Grant & Quay, 1977; Mayhew, 1958.

LATILONG STATUS

S	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---

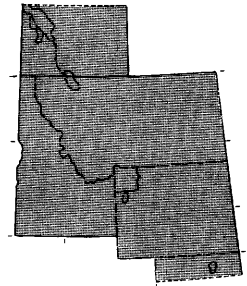
S	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---

s	S	S	S
---	---	---	---

S	S	S	S
---	---	---	---





## Barn Swallow (*Hirundo rusticola*)

**Identification:** This is the only North American swallow with a deeply forked tail, and also the only one with orange to rusty brown underparts. Above it is mostly dark bluish black, like several of the other swallows. Often found near barns or other farm buildings, which provide nest sites.

### LATILONG STATUS

S	S	S	s
S	S	S	S
S	S	S	S

S	S	S	S
S	S	S	S
S	S	S	S

S	S	S	S
s	S	S	S
S	S	S	S

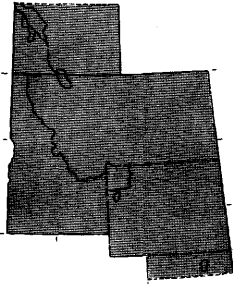
**Status:** A summer resident throughout the region, including the montane parks, where it is a common to occasional breeder in all.

**Habitats and Ecology:** Except for the purple martin, this species is the swallow that is most closely associated with humans in the Rocky Mountain region. Although it may still occasionally nest on cliff or cave walls, its normal nesting sites are the horizontal beams or upright walls of buildings and similar structures.

**Seasonality:** Colorado records are from April 7 to October 20, and Wyoming records extend from April 21 to October 4. In Montana and southern Alberta the birds usually arrive in late April and depart by late September. Wyoming egg records are from May 16 to July 15, and similar dates seem to apply elsewhere in the region.

**Comments:** Barn swallows are persistent nesters, and usually begin a second clutch within a few days of fledging the first family. There is typically a month's span between nesting cycles, and in northern areas second broods may be difficult to bring to fledging before the onset of cooler weather.

**Suggested Reading:** Snapp, 1976; Samuel, 1971.



### Gray Jay (*Perisoreus canadensis*)

*Identification:* This common species is the size of a blue jay, but lacks a crest, is mostly grayish black and whitish, with a black nape, and white cheeks. Young birds are almost uniformly dark gray, except for a white "whisker" patch. This is the species that most often appears at picnic areas and campgrounds, boldly looking for food.

*Status:* A resident in montane forests throughout the region; present in all the montane parks and relatively common in all.

*Habitats and Ecology:* This species is associated with a wide variety of boreal and montane coniferous forest types, and occasionally extends into aspens and riparian woodlands outside the breeding season. Nesting almost always is in coniferous vegetation.

*Seasonality:* A permanent resident throughout the region in forested areas, with little seasonal movement. Eggs in Colorado have been reported from March 17 to May 2, and in Wyoming nestlings have been seen as early as April 11. In Jasper N.P. fledged young have been seen by mid-May, and nesting in Alberta sometimes begins as early as March.

*Comments:* This familiar bird is well known to every camper in the area; it is also commonly called the "whiskey jack" and the "Canada jay" as well as "camp robber." Like the Clark's nutcracker, the birds may cache any excess tidbits that they obtain, and return to the food supply at a later time.

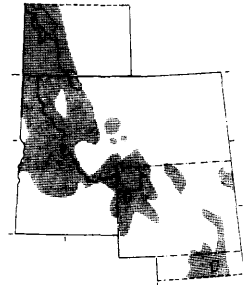
*Suggested Reading:* Rutter, 1969; Dow, 1965; Goodwin, 1976.

#### LATILONG STATUS

R	r	R	
r	R	r	R
R	r	r	r

R	R	M	r
r	R	R	
	R	r	M

r		r	r
M	M	r	r
	R	R	R



## Steller's Jay (*Cyanocitta stelleri*)

*Identification:* The same shape and size as the familiar blue jay, but with a more distinct crest and a nearly uniformly deep blue color, with white markings limited to the area above and in front of the eyes. The species' calls include various loud and raucous notes, including a repeated *shook* call.

### LATILONG STATUS

r	r	R	
r	R	r	R
R	R	r	r

R	R	r	M
r	R	R	
s	R	M	M

M		r	M
M	r	r	R
R	R	R	R

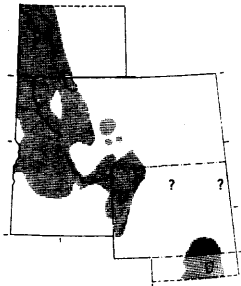
*Status:* A resident in coniferous woodlands throughout the region. Present in all the montane parks, and breeding in most or all, but less common northwardly.

*Habitats and Ecology:* This species is centered in the ponderosa pine zone, but also extends down into the pinyon-juniper zone, and as high as the Douglas fir zone. During the non-breeding season the birds may wander well away from their coniferous forest habitats, sometimes coming into cities and feeding at bird feeders during winter.

*Seasonality:* A permanent resident throughout the region. Colorado egg records are from April 23 to June 3, and egg records from Wyoming and Montana are from May 15 to June 28. Recently fledged nestlings have been seen in Montana as late as August 17.

*Comments:* The Steller's jay replaces the blue jay west of the Great Plains, and occupies much the same niche as does that species in the deciduous forests of eastern North America. Only in Colorado and perhaps eastern Wyoming do these two species possibly come into any natural contact, and some hybridization has been reported between them.

*Suggested Reading:* Brown, 1964; Goodwin, 1976.



## Blue Jay (*Cyanocitta cristata*)

*Identification:* This jay is crested similarly to the Steller's jay, but is grayish underneath, has white barring and spotting on the wings, and white tips on the tail feathers. It has a loud call, including a shrill *thief* call, and a mellow and whistled *too-weedle* note that is repeated several times.

*Status:* A local resident in eastern and northern portions of the region, mainly in deciduous habitats. A rare vagrant in the montane parks, but gradually extending its range westwardly and perhaps becoming more common in the Rocky Mountain area.

*Habitats and Ecology:* Widely distributed in deciduous woodland, city parks, suburbs, and almost anywhere there is an intersection of woods and open grassy areas. Riparian woods, with large willows or cottonwoods, are favored habitats on the western plains.

*Seasonality:* A permanent resident in southern parts of the region; more northern birds may move to cities or other protected sites during severe weather. Most records for Wyoming are between May 6 and October 26, suggesting some migration in that state. There are few regional egg records, but in North Dakota active nests have been reported from May 7 to June 2.

*Comments:* This adaptable and somewhat flamboyant bird adds a good deal of color and sound to any area, but it is also a notorious stealer of eggs and small nestling birds, and so is often a hazard to breeding songbirds of a particular area. It has now reached eastern British Columbia in its western range extension, and is starting to appear in Oregon and California during winter.

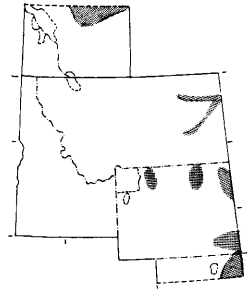
*Suggested Reading:* Hardy, 1961; Goodwin, 1976.

### LATILONG STATUS

	M	M	
?	M		
V	M	M	M

M	M	M	M
		R	
		M	M

M		R	M
		M	r
		M	R



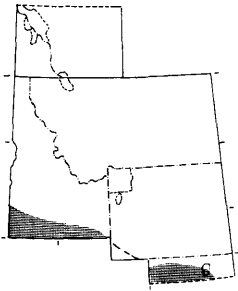
## Scrub Jay (*Aphelocoma caerulescens*)

*Identification:* This crestless jay has bluish upperparts except for a brown back, a white throat bounded by a blue "necklace," and pale gray underparts. It is most similar to pinyon jay, but that species is almost uniformly dull blue above and below.

### LATILONG STATUS



		M	
M	M	M	M
R	R	s	R



*Status:* A local migrant or summer resident in the southwestern parts of the region, south of the Snake River in Idaho and in northwestern Colorado. Rare or absent from the montane parks, but occasional at Dinosaur N.M., where breeding is possible.

*Habitats and Ecology:* Associated with low arid woodlands, including pinyon-juniper and oak-mountain mahogany, and less frequently extending into the ponderosa pine zone where oaks are also present. Often found along brushy ravines or wooded creek bottoms.

*Seasonality:* Probably a resident where it occurs, except at the extreme northern edge of its range, where migrant or vagrant non-breeders may be seen. In Colorado egg records extend from May 2 to June 16. Utah records are from April 6 to May 20.

*Comments:* This attractive jay is inclined to form permanent pair bonds and to remain in such pairs or family groups even outside the breeding season. At least in Florida, it has been found that sometimes immature birds (usually a pair's earlier offspring) will help to feed subsequent young and to help defend the territory. Up to three such "helpers" have been seen at a single nest.

*Suggested Reading:* Woolfenden, 1975; Hardy, 1961; Ritter, 1972; Pitelka, 1951.

## Pinyon Jay (*Gymnorhinus cyanocephalus*)

*Identification:* Like the preceding species, a crestless jay, but in this species the plumage is almost entirely pale to dark blue, with slight whitish streaking on the throat but no definite "necklace." As with the scrub jay, it also has a relatively short tail but has an unusually long bill. It also flies in a direct line, without the undulations typical of the scrub jay. Its usual flight call is a loud, cat-like *mew*.

*Status:* A resident over much of the southern parts of the region, including southern Idaho, southern Montana, and most of Wyoming, especially at lower elevations. Rare in the montane parks of Wyoming and Colorado.

*Habitats and Ecology:* Generally associated with pine forests growing on dry substrates, especially the pinyon-juniper association, but extending during the non-breeding period into the oak-mountain mahogany, sagebrush, and desert scrub habitat types.

*Seasonality:* Resident in most of the area concerned, but somewhat migratory at the northern parts of the region. Colorado egg records are from March 23 to May 19, which range encompasses the records for elsewhere in the region.

*Comments:* These are relatively gregarious jays, remaining in flocks for much of the year, and probably establishing fairly permanent pair bonds within such flocks. Caching behavior, mainly of pine seeds, is important in this species, and part of courtship consists of the passing of pine seeds from one bird to another.

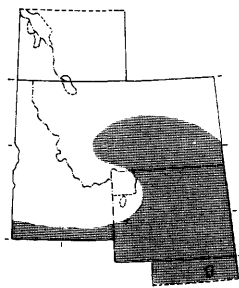
*Suggested Reading:* Balda & Bateman, 1971, 1973; Balda et al., 1972; Bateman & Balda, 1973.

### LATILONG STATUS

M	M		
V	M	M	M

R	S	s	R
	M	r	r
	M	r	r

R	M	R	M
r	R		M
R	R		R



### Clark's Nutcracker (*Nucifraga columbiana*)

*Identification:* Another "camp-robbing" species that frequents picnic areas and other food sources. It somewhat resembles the gray jay, but has an entirely pale gray head, and has white outer tail feathers and large white spots on the trailing edge of the inner wing feathers. One of the common calls is a loud, grating crow.

#### LATILONG STATUS

r	R	R	r
r	R	r	R
R	R	R	r

R	R	r	r
R	R	R	R
	R	r	r

r	R	R	r
M	M	r	r
R	R	R	R

*Status:* A resident in wooded areas over much of the region, common in all the montane parks and breeding in all of them.

*Habitats and Ecology:* Widespread in coniferous habitats, from the ponderosa pine zone to timberline. More common in the higher coniferous zones in summer, but descending during winter to the pinyon zone and sometimes out onto the plains areas.

*Seasonality:* A permanent resident throughout its range in the region. Colorado egg records are from March 15 to April 16, and in Wyoming eggs have been seen from the end of February onward, with nestlings noted as late as May 13. Eggs have been seen from March 19 to April 27 in Montana, and nest-building observed in Banff N.P. during the first half of April.

*Comments:* "Nutcracker" is perhaps not the very best name for this species, which favors the large seeds of the pinyon pine where they are available, but otherwise take a large variety of foods. The species is somewhat irruptive, and in some winters appear in large numbers in the desert and lowland areas of the western states. Like all jays, it is highly adaptable and efficient at finding new food sources.

*Suggested Reading:* Dixon, 1934; Mewaldt, 1956; Tomback, 1977.



## Black-billed Magpie (*Pica pica*)

*Identification:* Easily identified by its long, flowing tail, its black-and-white body color, and its black wings with flashing white inner markings that are exposed in flight.

*Status:* A resident throughout the region, in most habitats. Present and a common breeder in all the montane parks.

*Habitats and Ecology:* Of widespread occurrence, but especially common in riparian areas with thickety vegetation, agricultural areas with scattered trees, sagebrush, aspen groves, and the lower levels of the coniferous forest zones. Small, thorny trees are especially favored nest sites, but junipers and similar trees are also used.

*Seasonality:* A permanent resident in the area. Egg records for Colorado are from March 26 to May 29, with a peak from April 24 to May 8. Montana records are from March 28 to May 26, and are centered between May 6 and 12.

*Comments:* One of the characteristic birds of the western states, the black-billed magpie is an opportunistic scavenger that feeds on road-killed rodents, the eggs and nestlings of birds, and sometimes even pecks at open sores of livestock and other ungulates. Their conspicuous nests are well protected by several layers of twigs that enclose an egg chamber consisting of a mud-cup lined with soft materials.

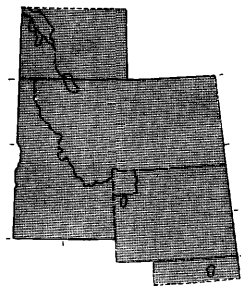
*Suggested Reading:* Linsdale, 1937; Erpino, 1968; Jones, 1960; Goodwin, 1976.

### LATILONG STATUS

r	R	R	r
R	R	R	R
r	R	R	R

R	R	R	R
R	R	R	R
R	R	R	R

R	R	R	R
R	R	R	R
R	R	R	R





## American Crow (*Corvus brachyrhynchos*)

*Identification:* This familiar bird scarcely needs description, but might be confused with the common raven if its smaller size, rounded rather than wedge-shaped tail, and "caw" call rather than croaking voice are not noted. It also has a relatively smaller and weaker bill than do ravens, and does less gliding or soaring.

### LATILONG STATUS

s	R	s	s
s	s	R	S
R	R	R	S

R	S	S	R
s	R	M	R
R	R	M	R

M	r	r	M
M	R	r	R
R	R	R	R

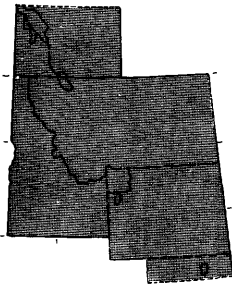
*Status:* A summer or year-round resident in wooded habitats throughout the region, but more common at lower altitudes, and varying from common to rare in the montane parks, breeding in several.

*Habitats and Ecology:* Forested areas, wooded river bottoms, orchards, woodlots, large parks, and suburban areas are all used by this species; it is often replaced by ravens in rocky canyons and higher montane areas.

*Seasonality:* Present throughout the year in the southern parts of the region, but distinctly migratory. Migration peaks are evident in Wyoming during March and April, and in Montana the birds are present mainly from late March to October, with a few overwintering in most years. Wyoming egg records are from May 5 to July 1, and Alberta records extend from May 2 to June 9, with a peak from May 13 to 24.

*Comments:* The American crow is a good deal smaller than the raven and in some areas, such as Jackson Hole, it seems to be competitively excluded from habitats that it might well occupy if the raven were not already there.

*Suggested Reading:* Chamberlain & Cornwell, 1961; Emlen, 1942.



## Common Raven (*Corvus corax*)

*Identification:* A very large blackish bird with a rather wedge-shaped tail, a heavy bill, a low, croaking call, and a somewhat shaggy throat. Only the American crow can be mistaken for it, and any of the above-mentioned characteristics should separate the two species fairly easily.

*Status:* A permanent resident throughout much of the area, mainly in mountainous regions. Present in all of the montane parks, and breeding in all of them.

*Habitats and Ecology:* Generally associated with wilderness areas of mountains and forests, especially where bluffs or cliffs are present for nesting. Where these are unavailable, tall coniferous trees are used for nesting, as in Jackson Hole, where over 90 percent of the nests are in trees. Often found all the way to timberline in late summer, or even in alpine tundra areas. They also extend out into sage and grassland areas, scavenging for road-killed mammals and birds.

*Seasonality:* A resident wherever it occurs in the region. Colorado egg records are from April 13 to June 22, and this range encompasses the available records from farther north. In Colorado nestlings have been seen as early as mid-April. In Jackson Hole the egg period is from early April to mid-June.

*Comments:* This intelligent and adaptable bird has generally shunned human contact, in contrast to most of the jays and crows, and has remained associated with wilderness areas. They are effective predators of eggs and nestlings, and also share the carcasses of large mammals such as elk with eagles and coyotes in the Jackson Hole area.

*Suggested Reading:* Shiehl, 1978; Harlow, 1922; Tyrell, 1945; Dorn, 1972.

### LATILONG STATUS

R	R	R	r
R	r	r	R
R	R	R	R

R	R	r	r
r	R	R	R
s	R	R	R

R	M	M	R
M	M	r	r
R	R	R	R

